

Analysis of spatial scale sizes

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Updated date: Dec 11, 2019

 An abbreviated version of this protocol was published in eLIFE in Sep 2019

Processing of different spatial scales in the human brain

DOI: 10.7554/eLife.47492

Detailed protocol

For each stimulus provided by each participant, we identified the latitude and longitude of the stimulus location, if it was a name which could be identified. 72% of stimuli locations were identified (65% for neighborhoods, 83% for cities, 72% for countries and 70% for continents). The pairwise distances between all items in each location and scale were calculated using the Haversine formula (to account for the earth's globular shape), using a script provided by M Sohrabinia: <https://www.mathworks.com/matlabcentral/fileexchange/38812-latitude-distance>. A linear fit to the resulting logarithmic values shows a fit of $r^2 = 0.98$, indicating that scale transitions reflect a logarithmic increase in environmental size.

How to cite: (Readers should cite both the Bio-protocol preprint and the original research article where this protocol was used)

1. Peer, M. (2019). Analysis of spatial scale sizes. Bio-protocol Preprint. bio-protocol.org/prep114.
2. Peer, M., Ron, Y., Monsa, R. and Arzy, S. (2019). Processing of different spatial scales in the human brain. eLIFE. DOI: [10.7554/eLife.47492](https://doi.org/10.7554/eLife.47492)

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